



It appears only natural to assume that as our ears pick up sound waves, they convert them into electrical nerve signals that represent the sounds, a loud sound producing a large nerve signal, silence producing no nerve signal at all, and once these nerve signals arrive at the brain we hear them as sounds.

However, our auditory system is not that simple. The electrical signals that travel from the ear to the brain are not an electrical representation of audio waves. The signals passing to the brain when there are no sounds are as strong as the signals produced by loud sounds.

Before the electrical signals from the ears are passed to that portion of the brain that hears the sounds, they pass through neural networks that act as filters. These filters are part of the subconscious part of the brain, and are closely connected with the part of the brain that controls emotions and the automatic response of the body to danger.

Experience continuously modifies these neural networks, changing which signals are enhanced, which are attenuated, and which totally suppressed, before the signals are presented to the cerebral cortex to be perceived as sounds. Essentially, these neural networks try to pass sounds on a "need to hear" basis.

Think of how we detect the sound of our own name, a distant car horn, or a new baby stirring in its sleep, whereas we may be unaware of the sound of the blood rushing through our arteries, rain pounding on the roof, or traffic noises from a nearby street.

Signals that are new, or associated with a negative experiences, are enhanced to alert the body to prepare for "fight or flight". Interesting enough, signals that are recognised as representing a known danger evoke a weaker reaction of the autonomic system than those categorised as an unknown danger. Signals that are recognised as having occurred before, and not being associated with positive or negative events, evoke the least reaction.

This process is called habituation. Therefore, for Tinnitus habituation to occur, you must not have any negative association with the Tinnitus. You must be free of fear that the Tinnitus will make you loose your hearing, or that it is a sign of a serious physical illness. An Ear-Nose-Throat specialist will be able to verify the absence of physical conditions, or treat those that may be present.

## How does the Tinnitus Tamer work?

The Tinnitus Tamer uses repeating signals that are similar to the Tinnitus, interspersed with silent periods. These signals are not associated with anything of significance, and will modify the neural networks that they will attenuate the Tinnitus sounds as representing a neutral, nonsignificant signal.

In some people, the Tinnitus will abruptly disappear, in others the Tinnitus will improve in stages:

- During a training session.
- For some time after a training session.
- Between training sessions.

Finally, the Tinnitus will be at constant low level that is no bother, or it may be gone altogether.

When you no longer hear the Tinnitus, it is moot to consider whether the Tinnitus is gone, or if you still have Tinnitus, but no longer hear it.

## How do I get the Tinnitus Tamer?

Use your Internet browser to connect to <http://www.vavsoft.com>. Select the Tinnitus Tamer version appropriate for your computer, and click "Download".

## What other equipment do I need?

You need a Macintosh or Windows computer, and a pair of head phones.

## Can I try out the TinnitusTamer?

Yes, After you downloaded and installed the Tinnitus Tamer, you can use it for fourteen days without paying for it.

## What is the cost of the Tinnitus Tamer?

A single user licence is \$35 US. This only a fraction of what you would have to pay for one training session at a clinic. This licence allows you to install the Tinnitus Tamer on a computer in your home, and a computer at your place of work.

## How do I pay for the Tinnitus Tamer?

You can purchase a Tinnitus Tamer licence trough our secure Kagi store.

You can pay by cash, check, VISA, MasterCard, Discover, American Express, First Virtual, PayPal, or Money Order.

## More information on the Tinnitus Tamer?

Use your Internet browser, connect to <http://www.vavsoft.com>, and download the twenty-two page User Manual.